

KIPNIS, B. YA.; TUGCV, I. I.

Paper Industry

Efficient process for grinding fibers in hollanders.  
Leg. prom., 12, No. 6, 1952

9. Monthly List of Russian Accessions, Library of Congress, October 1953,<sup>2</sup> Uncl.

TUGOV, I.I.; PUSHKIN, P.S.

Shoe Machinery

Work indexes of vulcanizing presses under different production conditions, Leg. prom.,  
12, No. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

T-4-1-1

5184. Efficacy of various production methods for shaped rubber components. I. I. Troev. *Lezgaya* Prom. 1961, No. 6, 16-8; *Pravostavka*, 1960, 2, 91. Gives 3000 pairs of microperous shoes per shift out per shift and press on Revolution process. Savings is 14.7%. Output may be increased to 10,000 pairs and better quality resulting from modifying the press. A cutting machine is more efficient. Output may be as high as 55,000 pairs. Automatic presses produce more heels, but of lower quality, than Revolution presses. 50111

Army

10

for

TUGOV, Ivan Ivanovich; ZHILIN, D.I., retsenzents; MIKHAYLOV, V.A., retsenzents;  
OL'SHANETSKIY, M.S., retsenzents; TORMOZOVA, L.I., redaktor; MEDVEDEVA,  
L.I., tekhnicheskii redaktor

[Technology of leather substitutes and industrial fabrics] Tekhnologiya  
zamenitelei kozhi i tekhnicheskikh tkanei. Izd. 2-oe, dop. i perer.  
Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva legkoi promyshl. SSSR,  
1956. 531 p. (MLRA 10:1)

(Leather substitutes) (Textiles)

L 24395-66 EWT(d) IJP(c)

ACC NR: AP6010986

SOURCE CODE: UR/0056/66/050/003/0653/0659

AUTHORS: Smorodinskiy, Ya. A.; Tugov, I. I.

ORG: Physicochemical Institute im. L. Ya. Karpov (Fiziko-khimicheskiy institut)

TITLE: Concerning complete sets of observables

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 3, 1966, 653-659

TOPIC TAGS: differential operator, second order differential equation, Hamiltonian, Schroedinger equation, line spectrum, eigenvalue, Euclidean space

ABSTRACT: The authors propose a method for writing down  $n - 1$  linearly-independent second-order differential operators which commute with the Hamiltonian and with each other in any coordinate system in which the variables of the corresponding Schroedinger equation in a Riemann space  $R_n$  can be separated. It is shown that there are  $3^4$

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sets of the operators defined in these coordinate systems. The discrete and continuous spectra of the hydrogen atom are considered as examples. The separation constants are the eigenvalues of the operators. The equations for the 11 coordinate systems in which the variables can be separated in a three dimensional Euclidean space are also given. Orig. art. has: 16 formulas.

SUB CODE: 20/ SUBM DATE: 07Aug65/ ORIG REF: 003/ OTH REF: 003

Card

2/206R

TUGOV, L.L., kand. tekhn. nauk; GOROKHOVSKAYA, L.L., mladshiy nauchnyy  
sotrudnik

Use of synthetic fibers reclaimed from the cord of worn tires.  
Tekst. prom. 25 no.8:6-8 Ag '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut plenochnykh  
materialov i iskusstvennoy kozhi.

L 1557-66 (A) EWT(m)/T/EWP(j) RM

ACCESSION NR: AP5021820

UR/0342/65/000/008/0006/0008  
677.46.025.001.5

AUTHOR: <sup>44.55</sup> Tugov, I. I. (Candidate of technical sciences); <sup>19B</sup> Gorokhovskaya, L.L. <sup>44.55</sup>  
(Junior research associate)

TITLE: Use of chemical fibers regenerated from cord threads of worn tires <sup>15</sup>

SOURCE: <sup>15.44.55</sup> Tekstil'naya promyshlennost', no. 8, 1965, 6-8

TOPIC TAGS: regenerated rayon fiber, felt, nonwoven fabric, artificial leather

ABSTRACT: Studies made by the Vsesoyuznyy nauchno-issledovatel'skiy institut plenochnykh materialov i iskusstvennoy kozhi (All-Union Scientific Research Institute of Film Materials and Artificial Leather) and several other enterprises established the following facts: rayon and capronic "corvit" staple fibers separated from cord threads of worn tires by swelling can be used in the wool industry and the milling and felt industry for the production of nonwoven fabrics and artificial leather. The use of regenerated fiber will permit a 20% increase in the production of milled and felt articles and cloth without causing an increase in the consumption of wool. Thus, up to 50% of the expensive cotton used in the production of

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L 1557-66

ACCESSION NR: AP5021820

artificial leather will be used to meet other needs. The regenerated fiber can be processed into articles satisfying technical requirements without any significant changes in the existing technological processes. The use of regenerated fiber will substantially reduce the production costs. Orig. art. has: 3 tables.

ASSOCIATION: VNIPIK

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 002

OTHER: 000

Card 2/2 DP

AL'TZITSER, V.S.; SAFRONOV, Yu.M.; TUGOV, I.I.; ROGOV, V.M.

Roof materials based on used resins. Biul.tekh.-ekon.inform.Gos.  
nauch.-isl.inst.nauch.i tekh.inform. no.12:17-18 '63.  
(MIRA 17:3)

AL'TZITSER, V.S.; TUGOV, I.I.; ROGOV, V.M.; POMERANTSEVA, T.K.

Manufacture of water pipes of secondary polymer materials for  
agriculture. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i  
tekh.inform. 16 no.8:23-25 '63. (MIRA 16:10)

IL'IN, S.N., inzh.; TUGOV, I.I., kand.tekhn.nauk; ARKHANGEL'SKIY, N.A.,  
Doktor tekhn.nauk

Manufacture of spinnable fibers from the cord threads of worn  
tires. Report No.1: Splitting rubberized viscose yarn into  
separate plies. Nauch.-issl.trudy VNIIPK no.12:49-57 '60.  
(MIRA 16:2)

(Tire fabrics)

(Textile fibers, Synthetic)

TUGOR, I.I.

The theory of swelling of rubber-cord construction in hydrocarbons,

Report submitted for the 4th Scientific research conference on the chemistry and technology of synthetic and natural rubber, Yaroslavl, 1962

TUGOV, I.I., kand.tekhn.nauk; KUTLINA, L.A.

Swelling of the carcass plies of automobile tire treads in  
various hydrocarbons. Nauch.-issl. trudy VNIIPK no.13:43-49  
'62. (MIRA 18:1)

TUGOV, I.I., kand.tekhn.nauk; GEORGIYEVA, V.S., inzh.

Changes occurring in the properties of carcasse rubber during  
its swelling. Nauch.-issl.trudy VNIIPK no.12:58-68 '60.  
(MIRA 16:2)

(Rubber--Testing)

TUGOV, I.I., kand.tekhn.nauk, nauchnyy sotrudnik; REUTOV, O.S., inzh.,  
nauchnyy sotrudnik

Nonwoven fabrics with a base of short viscose fibers. Tekst.prom.  
22 no.11:69-72 N '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut plenochnykh  
materialov i iskusstvennoy kozhi (VNIIPK).  
(Nonwoven fabrics) (Rayon)



TUGOV, Ivan Ivanovich; ARKHANGEL'SKIY, N.A., prof., doktor tekhn.  
nauk, retsenzent[deceased]; NOVIKOV, V.S., inzh.,  
retsenzent; PLEMYANNIKOV, M.N., red.; GRACHEVA, A.V., red.;  
VINOGRADOVA, G.A., tekhn. red.

[Problems in the utilization of worn-out tires; complete  
reclaiming by the swelling method and secondary use of  
polymer materials from worn-out tires] Problemy ispol'zova-  
niia iznoshennykh shin; kompleksnaia regeneratsiia metodom  
nabukhaniia i vtorichnoe ispol'zovanie polimernykh materialov  
iz iznoshennykh shin. Moskva, Rostekhzdat, 1962. 368 p.  
(MIRA 15:9)

(Tires, Rubber) (Rubber, Reclaimed)

DOGADKIN, B.A.; TUTORSKIY, I.A.; TUGOV, I.I.; AL'TZITSER, V.S.; KROKHINA, L.S.;  
SHERSHNEV, V.A.

Chemical modification of vulcanizates. Part 1: Interaction between  
vulcanizates and styrene, methyl methacrylate, and isoprene. Vysokom.  
soed. 3 no.5:729-733 My '61. (MIRA 14:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni  
Lomonosova i Vsesoyuznyy nauchno-issledovatel'skiy institut plenochnykh  
materialov i iskusstvennoy kozhi.  
(Polymers)

22566

S/190/61/003/005/009/014  
B110/B220

15.9000

1436, 2209

AUTHORS:

Dogadkin, B. A., Tutorskiy, I. A., Tugov, I. I.,  
Al'tzitsler, V. S., Krokhina, L. S., Shershnev, V. A.

TITLE:

The chemical modification of vulcanizates. I. The reaction  
of vulcanizates with styrene, methyl methacrylate, and  
isoprene

PERIODICAL:

Vysokomolekulyarnyye soyedineniya, v. 3, no. 5, 1961,  
729-733

TEXT: The chemical modification of vulcanizates is completely new and  
hardly mentioned in literature. The purpose of the present paper was to  
study the chemical modification process caused by copolymerization of the  
vulcanizates with the monomer. Natural rubber (I) or a mixture of natural  
rubber and butadiene styrene rubber CKC-30 (SKS-30) (II) were disintegrated  
to particles of about 1 mm, scrubbed in the Soxhlet with acetone, and  
filled into a weighed ampulla. The monomer (purified styrene, methyl  
methacrylate, or isoprene) was added in quantities assuring the uniform  
swelling of the vulcanizate. Then the ampulla was sealed and heated in

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The chemical...

an oil thermostat. Conversion of monomer and yield in graft polymer were determined by weight. The product of copolymerization was extracted with the hot solvent of the formed homopolymer: methyl ethyl ketone for polystyrene, acetone for polymethyl methacrylate, benzene for polyisoprene. In order to initiate the copolymerization process the vulcanizates were ozonized first of all in a suspension of  $\text{CCl}_4$  to introduce functional (probably peroxide) groups. One has made use of the ozonizer developed by the Kafedra gazovoy elektrokhimii MGU im. Lomonosova (Department for Gas Electrochemistry of the Moscow State University imeni Lomonosov). The experimental temperatures were: 60, 100, 110, 150, and 180°C. The curves of kinetic copolymerization of non-ozonized I and II are represented in Figs. 2a and 6. In case the vulcanizate had been ozonized previously, a large fraction of the isoprene added polymerized already at 60°C. A considerable part of the polymerized isoprene forms with the vulcanizate a graft polymer (Fig. 6). Also for the copolymerization of methyl methacrylate with vulcanizate, its previous ozonizing raises the reaction rate and yield in graft polymer (Fig. 7). The active centers of the rubber existing in the vulcanizate (double bonds and  $\alpha$ -methylene groups)

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The chemical...

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are able to act as branching points in the chain of the trimeric polymer and, thus, form the graft polymer. Moreover, the initial polymerization may be effected by oxygen-containing groups existing on the surface of the crushed vulcanizate. The surface increase effected by adsorption of monomers on the crushed polymerizate also accelerates the reaction. When polymerizing the non-ozonized vulcanizates with styrene at 150-180°C, the polymerization reaches its maximum already after the first 2 to 3 hr and then remains constant, since the thermopolymerization of styrene is practically completed. With a decrease in temperature of polymerization the yield in copolymers increases as compared to the total monomer polymerized. Yu. M. Yemel'yanov assisted in the experiments. There are 7 figures and 8 references: 3 Soviet-bloc and 5 non-Soviet-bloc. The two references to English-language publications read as follows:  
Ref. 1: R. I. Ceresa, W. F. Watson, Trans. and Proceed 35, 19, 1959.  
Ref. 4: I. Green, E. F. Sverdrup, Industr. and Engng. Chem. 48, 2138, 1956.

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Card 3/8

22566

The chemical...

S/190/61/003/005/009/014  
B110/B220

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. Lomonosova (Moscow Institute of Fine Chemical Technology imeni Lomonosov) Vsesoyuznyy nauchno-issledovatel'skiy institut plenochnykh materialov i iskusstvennoy kozhi (All-Union Scientific Research Institute of Film Materials and Artificial Leather)

SUBMITTED: July 25, 1960

Fig. 2: kinetics of copolymerization: Legend: a) Vulcanizate of natural rubber with styrene; 6) vulcanizate of natural + SKC-30 rubber with styrene. Full-line curves = styrene conversion; broken-line curves = yield in graft polystyrene. Temperature of polymerization: 1) = 110°C; 2) = 150°C; 3) = 180°C. c) time of polymerization, hr.

Card 4/8

KHOROSHAYA, Ye.S.; LYKOVA, A.N.; TUGOV, I.I.; IL'IN, S.N.;  
MINAYEV, A.P.

Express method for determining rubber content of used tire cord  
fibers. Kozh.-obuv. prom. 2 no. 11:23 N '60. (MIRA 13:12)  
(Tire fabrics)

TUCOV, IVAN IVANOVICH

N/5  
614.86  
.T9  
1956

Tekhnologiya zameniteley kozhi i tekhnicheskikh tkaney (Technology of  
synthetic leather and other synthetic fabrics) Izd. 2., dop. I perer.  
Moskva, Gizlegprom, 1956.  
531 p. illus., diagrs., tables.

MEA



LIVYY, G.V.; ZHURKE, V.A.; LANDA, I.M.; TUJOV, I.I.

Effect of rubber dust on properties of vulcanizates. Leg. prom. 16  
no.8:28-30 Ag '56. (MIRA 10:12)

(Rubber)

AL'BAN, M.A.; LANDA, I.M.; PISARENKO, A.P.; TUGOV, I.I.

Production of lightweight, molded, microporous footwear parts.  
Leg.prom.17 no.9:13-16 S '57. (MIRA 10:12)  
(Leather substitutes) (Rubber goods)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757410007-9

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APPROVED FOR RELEASE: 03/14/2001

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**"APPROVED FOR RELEASE: 03/14/2001**

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**APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757410007-9"**

AL'TZITSER, V.S., nauchnyy sotrudnik; TUGOV, I.I., kand. tekh. nauk

Reclaiming of rubber obtained in the complex processing  
of worn-out tire treads with the swelling method. Nauch.-  
issl. trudy VNIIPK no.14:15-25 '63. (MIRA 18:12)

TUGOV, I.I., kand. tekhn. nauk; GOROKHOVSKAYA, L.L., nauchnyy sotrudnik

Evaluating the various methods for the cleaning of  
"korvit" fibers from undigested threads. Nauch.-issl.  
trudy VNIIPK no.14:143-147 '63.

(MIRA 18:12)

KHOBOSHAYA, Ye.S., kand. khim. nauk; KOROL'KOVA, K.D., mladshiy nauchnyy  
sotrudnik; AL'TZITSER, V.S., mladshiy nauchnyy sotrudnik;  
Prinimali uchastiye: YELISEYEVA, L.I.; ANYUTINA, N.S.; TUGOV,  
I.I.; SHAKHNINA, L.V.

Rapid method for analyzing swollen rubber chips obtained in  
the complex processing of worn-out tire treads. Nauch.-issl.  
trudy VNIIPK no.14:170-177 '63. (MIRA 18:12)

SMORODINSKIY, Ya.A.; TUGOV, I.I.

[Complete sets of observables] 6 polnykh naborakh nabludeniyykh.  
Dubna, Ob"edinennyi inst iadernykh issledovaniy, 1965. 13 p.  
(MIRA 29:11)



**"APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757410007-9**

**APPROVED FOR RELEASE: 03/14/2001**

**CIA-RDP86-00513R001757410007-9"**

TSYGANOV, G.A.; TUGOV, N.I.

Rational methods of hydrometallurgical processing of mixed  
antimony ores. Uzb.khim.zhur. no.6:19-28 '58. (MIRA 12:2)

1. Institut khimii AN UzSSR.  
(Antimony ores)

(Hydrometallurgy)

TSYGANOV, G.A., TUGOV, N.I.

Electrolysis of antimony in sodium sulfide solutions using  
powdered iron electrodes. Uzb. khim. zhur. no.2:36-51 '59.  
(MIRA 12:7)

1. Institut khimii AN UzSSR.  
(Antimony) (Electrolysis)

TUGOV, N. I.

Dissertation: "Diffusion of Electrolytic Hydrogen Through Iron Partitions in Alkaline Solutions." Cand Chem Sci, Inst of Chemistry, Acad Sci Uzbek SSR, Tashkent, 1954. (Referativnyy Zhurnal--Khimiya, Moscow, No 11, Jun 54)

SO: SUM 318, 23 Dec 1954

TUGOV, N.I.; TSYGANOV, G.A.

Hydrogen and oxygen overvoltage on antimony electrode. Uzb.  
khim. zhur, no.2:35-40 '58. (MIRA 11:8)

1. Institut khimii AN UzSSR.  
(Overvoltage) (Antimony) (Electrochemistry)

TUGOV, N.I.; TSYGANOV, G.A.

Hydrometallurgical method of preparing metallic antimony from concentrates. Uzb. khim. zhur. 7 no.2:17-21 '63. (MIRA 16:8)

1. Institut khimii AN UzSSR.  
(Antimony--Metallurgy)

*Togov, N. I.*

USSR/Chemistry - Electrochemistry

Card 1/1

Pub. 22 - 32/52

Authors :

Tsyganov, G. A., and Tugov, N. I.

Title :

Transmission of overvoltage over metallic baffle plates

Periodical :

Dok. AN SSSR 100/2, 319-321, Jan 11, 1955

Abstract :

Analysis is made of the results obtained by measuring the diffusion potentials of iron baffle plates placed in concentrated potassium hydroxide solutions in conditions when electrolytic hydrogen was diffused through these plates. The polarization and diffusion potentials of the baffle plate were measured by the compensation method by comparing with the mercury-oxide electrode. Four references: 3 USSR and 1 German (1950-1953). Graphs.

Institution :

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Presented by :

Academician A. N. Frumkin, July 23, 1954

TUGOV, P.I., kandidat istoricheskikh nauk

Carrying out Lenin's decrees on workers' control in  
Kazakhstan industry. Vest.AN Kazakh.SSR 16 no.4:57-66  
Ap '60. (MIRA 13:7)

(Communism) (Kazakhstan--Industries)



TUGOV, Yu. M., kandidat filosofskikh nauk (Moskva).

Works of an outstanding breeder and Darwin follower ("Selected  
works." Luther Burbank. Reviewed by IU.M. Tugov). Priroda 46  
no. 4: 118-120 Ap '57. (MLBA 10:5)  
(Burbank, Luther, 1849-1926)

SOKOLOV, L.B.; TURETSKIY, L.V.; TUGOVA, L.I.

Liquid - gas interfacial polycondensation. Part 2: Laws governing the gas phase synthesis of aromatic polyoxamides. Vysokom. soed. 4 no.12:1817-1821 D '62. (MIRA 15:12)

1. Vladimirskiy nauchno-issledovatel'skiy institut sinteticheskikh smol. (Oxamide) (Polymerization)  
(Phase rule and equilibrium)

ONELIN, E.S.; TUGOVIK, V.I.

4. The generalization of fault tectonics and its role in the  
localization of large-scale intrusions and their organization in the  
boundaries of the orogenic belt zone. (see also no. 2:3-1, 1962  
(vol. 18:2))

NOV 20, A.M.; T. 0000, C.S.

Some characteristics of the distribution of rare metal deposits  
in southern Buryatia and their genetic types. Trudy BZNI no.9:  
23-53 '82 (MIRA 18:2)

TUGOVIK, G.I.

Stage of the hydrothermal mineralization and genesis of molybdenum-  
tungsten deposits in the Dzhida ore zone. Geol. i geofiz. no.2:93-  
104 '64. (MIRA 18:4)

1. Buryatskiy kompleksnyy nauchno-issledovatel'skiy institut  
Sibirskogo o deleniya AN SSSR, Ulan-Ude.

TUGOVIK, G.I.

Relationship between the hydrothermal mineralization in the  
Buluktay deposit and lamprophyre dikes (western Transbaikalia). Izv.  
vys.ucheb.zav.; geol.i razv, 3 no.4:58-65 Ap '60. (MIRA 13:7)

1. Irkutskiy gorno-metallurgicheskiy institut.  
(Bulaktay region (Transbaikalia)--Mineralogy)

DVORKIN-SAMARSKIY, V.A.; TUGOVIK, G.I.

"Mineral resources, their classification, and formation" by  
S.A.Vakhromeev. Reviewed by V.A.Dvorkin-Samarskii, G.I.Tugovik.  
Izv.vys.ucheb.zav.; geol.i razv. no.2:105-106 F '62. (MIRA 15:3)

1. Buryatskiy kompleksnyy nauchno-issledovatel'skiy institut  
Sibirskogo filiala AN SSSR.  
(Mines and mineral resources) (Vakhromeev, S.A.)

TUGOVIK, G.I.; TELEGA, Yu.T.

Geological characteristics of the Dolon-Modon deposit. Geol. rud.  
mestorozh. no.5:118-122 S-O '60. (MIRA 13:10)

1. Irkutskiy gornometallurgicheskiy institut, Irkutskoye geologicheskoye upravleniye.  
(Transbaikalia--Geology, Economic)



TUGOVIK, G.I.

Composition and origin of the pipe body in the Buluktay molybdenum-tungsten deposit (western Transbaikalia). Izv.vys.ucheb.zav.; geol.i razv. 2 no.11:63-74 N '59. (MIRA 13:6)

1. Irkutskiy gornometallurgicheskiy institut.  
(Buluktay region--Geology)

TUGOVIK, G.I.

Genesis of the pipelike body of the Buluktay deposit. Trudy  
BKNII no.7:54-70 '61. (MIRA 16:4)  
(Dzhida Valley--Geology, Structural)

TUGOVIK, G.I.

Occurrence forms of melanocratic rocks in the Buluktayevskoye  
deposit. Izv.vys.ucheb.zav.; geol.i razv. 5 no.9:84-91 S '62.  
(MIRA 16:1)

1. Irkutskiy politekhnicheskii institut.  
(Transbaikalia—Dikes (Geology))

OCHIROV, TS.O.; DVORKIN-SAMARSKIY, V.A.; TUGOVIK, G.I.

Geological study of the Buryat A.S.S.R. Kraeved. sbor. no.7:  
12-25 '62. (MIRA 16:8)  
(Buryat A.S.S.R.—Geological research)

TUGULEA, A.; BUNEA, V.

On the optimum slot shape of a high frequency alternator. Studi  
cerd energet A 12 no.4:645-659 '62.

RUMANIA/Electronics - Electron Optics.

H.

Abs Jour : Ref Zhur - Fizika, No 7, 1959, 15862

Author : Tugulea, Andrei

Inst : -

Title : Approximate Analytic Calculation on Axis of a Magnetic  
Electron Lens

Orig Pub : Automat. si electron., 1958, 2, No 3, 95-98

Abstract : No abstract.

Card 1/1

TUGULEA, Andrei

Use of problems of electrostatics for the calculation of some  
improper integrals. Studii cerc energet A 12 no.4:687-689 '62.

TUGULEA, Andrei, ing., candidat in stiinte tehnice (Bucuresti);  
Mastero, Sanda, ing. (Bucuresti)

Solution of some electromagnetic induction problems.  
Electrotehnica 11 no. 5:163-172 My '63.

1. Conferentiar la catedra de electrotehnica a Institutului politehnic din Bucuresti (for Tugulea).
2. Sefa de lucrari la catedra de electrotehnica a Institutului politehnic din Bucuresti (for Mastero).



TUGULEA, Andrei; MILLEA, Aurel

Some considerations on the determination of the quasi-stationary  
electromagnetic fields in massive conductors. Studii fiz tehn  
Iasi 11 no.2:265-282 '60.

(Electric-power plants) (Electromagnetic fields)

TIMOTIN, A.; TUGULEA, A.

Interpretation of the Maxwell-Hertz electrodynamics in the  
light of the theory of relativity. Bul Inst Politeh 26  
no.2:127-145 Mr-Apr '64.

1. Chair of electrical engineering, Polytechnic Institute,  
Bucharest.

ACCESSION NR: AP3002966

R/0004/63/000/005/0163/0172

AUTHOR: Tugulea, Andrei (Engineer); Mastero, Sanda (Engineer)

TITLE: Dealing with certain problems of electromagnetic induction

SOURCE: Electrotehnica, no. 5, 1963, 163-172

TOPIC TAGS: electrodynamics, electromagnetic induction, electromagnetic field, single, pole, generator, flexible coil, Blondel experiment, Cullwick experiment, Weber force, Maxwell force, Maxwell theory

ABSTRACT: Problems of electromagnetic induction in moving bodies gave rise, lately, to numerous articles in scientific publications. This is an indication that there are still doubts as to the possibilities of explaining induction phenomena based on the electromagnetic field theory. The authors attempt to analyze these problems and show that they can also be correctly solved within the framework of the Maxwell, or Maxwell-Hertz, theory. Attempts to create new electrodynamics based on remote action by ignoring the electromagnetic field as a physical system are inconsistent. Several examples are given, including experiments by Cullwick and Blondel. The authors conclude that the Maxwell-Hertz theory is a compromise which

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ACCESSION NR: AP3002966

leads to correct results at low speeds (as compared to the speed of light) for problems of electromagnetic induction; these results are of technical interest. Orig. art. has: 7 figures and 26 formulas.

ASSOCIATION: Institutul politehnic din Bucuresti (Bucharest Polytechnical School)

SUBMITTED: 03Jan63

DATE ACQ: 23Jul63

ENCL: 02

SUB CODE: EE, GE

NO REF SOV: 000

OTHER: 014

Card 2/A

2

TUGULEA, V.

TUGULEA, V. Application of Goldin's theorems in teaching geometry to the secondary schools p. 656.

Vol. 8, no. 12, Dec. 1956

GAZETA MATEMATICA SI FIZICA SERIA A.

SCIENCE

ROMANIA

So: East European Accession Vol. 6, No.5, May 1957

SHCHABLOV, N.; LEKONTSEV, V.; NABOK, P.; VOTRIN, P. (Omskaya obl.);  
TALUBAYEV, S. (Omskaya obl.); TUGULEV, A. (Tatarskaya ASSR)

Volunteers at work. Pozh. delo 9 no.6:4 Je '63.

(MIRA 16:8)

1. Zamestitel' nachal'nika Otdela pozharney okhrany Vologodskoy oblasti (for Shchablov). 2. Starshiy inspektor gorodskoy pozharney chasti, Votkinsk, Udmurtskaya ASSR (for Lekontsev). 3. Starshiy inspektor Otdela pozharney okhrany, Kirov (for Nabok).

TUMILOV, V., Engineer

On new method of geodetic studies in Tbilisi Institute of engineers of railroad transport.  
M. Lenin, Tbilisi, Gruzinskiya SSR.

Soviet Source: N: Zarya Vostoka, Tbilisi, 15 Jan 48

Abstracted in USAF "Treasure Island", on file in Library of Congress, Air Information  
Division, Report No. 39670. Unclassified.

TUGUNOV, GARLINSKAIA, KHRAMIKHIN

Production of cholesterol in the Leningrad Meat Combine. p. 320

(Elemézesi Ipar, Budapest, Vol. 8, no. 10, Oct. 1954)

SO: Monthly list of East European Accessions (EEAL) Lc, Vol. 4, no. 6, Jun. 1955 Uncl



TUGUNOV, I.V., inzh.

Device for cutting grooves in concealed electric wiring.  
Energetik 10 no.9:27-28 S '62. (MIRA 17:1)

TUGUNOV, S.; GARLINSKAYA, Ye.; KHRAMIKHIN, P.

Production of cholesterol at the Leningrad Meat Combines. Mias.  
ind.SSSR 25 no.1:28-30 '54. (MLRA 7:3)

1. Leningradskiy myasokombinat. (Cholesterol)

ANDREYEV, L.A.; TUGARINOV, N.I.; YEREMIN, A.A.

Highly productive equipment for the study of gas corrosion.  
Trudy Inst.fiz.khim. no.7:105-106 '59. (MIRA 13:5)  
(Gases)  
(Corrosion and anticorrosives--Testing)

TUGARINOV, N.I.

Microfurnace for the observation of metal oxidation by  
microscope. Trudy Inst.fiz.khim. no.7:107-111 '59.

(MIRA 13:5)

(Metallic films) (Photomicrography)

TUGARINOV, N.I.; MOSKVICHEV, G.S.

Methods of corrosion testing in aggressive melts. Trudy Inst.  
fiz.khim. no.7:112-113 '59. (MIRA 13:5)  
(Corrosion and anticorrosives--Testing)

TUGUI, I., dr.

Will man overcome radiation? St si Teh Buc 16 no.10:21-23 0 '64.

TUCUNOV, P.I.; YABLONSKIY, V.S.

Distribution of heat insulation along a pipeline. Izv. vys. ucheb.  
zav.; neft' i gaz 4 no.6:105-109 '61. (MIRA 15:1)

1. Ufimskiy neftyanoy institut.  
(Petroleum--Pipelines) (Insulation (Heat))

TUGUNOV, P.I.; YABLONSKIY, V.S. [deceased]

Ground warm-up by linear and cylindrical sources. Izv.vys.ucheb.  
zav.; nef't' i gaz 6 no.9:81-86 '63. (MIRA 17:2)

1. Ufimskiy nef'tyanoy institut.



TUGUNOV, P.I.

Determining the safety time for the shutdown of a pipeline without expelling a high-solidification petroleum product. Neft. khoz. 42 no. 5:66-69 My '64. (MIRA 17:5)

TUGUNOV, P.I.; YABLONSKIY, V.S. [deceased]

Determining the temperature field of the ground around a  
pipeline in the process of cooling. Neft. khoz. 41 no.6:  
51-53 Je '63. (MIRA 17:6)

TUGUNOV, P.I.; NOVOSELOV, V.F.

Temperature change of a petroleum product when a hot pipe is  
put into operation. Izv. vys. ucheb. zav.; neft' i gaz 7  
no.3:99-102 '64. (MIRA 17:6)

1. Ufimskiy neftyanoy institut.

TUGUNOV, P.I.; YABLONSKIY, V.S.

Heating soils by a linear thermal source. Izv. vysh. ucheb. zav.;  
neft' i gaz 6 no.3:85-89 '63. (MIRA 16:7)

1. Ufimskiy neftyanoy institut.  
(Soils--Thermal properties)  
(Pipelines--Thermodynamic properties)

TUGUNOV, P.I.; YABLONSKIY, V.S. [deceased]

Determining the temperature outlet time of a pipeline through  
which a hot petroleum product is pumped in a conditionally  
stationary regime. Trudy NIITransneft' no.3:138-141 '64.  
(MIRA 18:2)

NOVOSELOV, V.F.; TUGUNOV, P.I.

Pressure changes at the beginning of a pipeline as it becomes  
filled. Izv. vys. ucheb. zav.; neft' i gaz 7 no.10:83-87 '64.  
(MIRA 18;2)

1. Ufimskiy neftyanoy institut.

TUGUNOV, P.I.; YABLONSKIY, V.S.

Heating soil by a linear source under boundary conditions of  
the 3d order. Izv. vys. ucheb. zav.; neft' i gaz 6 no.4:75-82  
'63. (MIRA 16:7)

1. Ufimskiy neftyanoy institut.  
(Petroleum pipelines--Thermodynamic properties)  
(Soil temperature)

L 33578-00 EWT(1) G1

ACC NR: AR6016255

SOURCE CODE: UR/0058/65/000/011/1038/1038

AUTHOR: Gershteyn, G. M.; Tugushev, R. Kh.

TITLE: Concerning the modeling of electromagnetic fields by inhomogeneities of waveguides

SOURCE: Ref. zh. Fizika, Abs. 11Zh260

REF SOURCE: Sb. Vopr. elektrich. modelirovaniya poley. Saratov, Saratovsk. un-t, 1964, 140-149

TOPIC TAGS: model, electromagnetic wave simulation, waveguide iris, waveguide transmission/ MNT-V3 test installation

ABSTRACT: The authors compare the calculated and experimental results of determining the parameters (reflection coefficient  $R$  and susceptance  $B_{sh}$ ) of inhomogeneities of waveguides which admit, in first approximation, the use of the electrostatic field for this purpose. The theoretical parameters of a capacitive diaphragm in a waveguide are given for different geometries of this diaphragm. The experimental determination of  $R$  and of  $B_{sh}$  was with the aid of modeling the distribution function of the Laplacian electrostatic field of the diaphragm and substituting it into the corresponding functional. The field was modeled with a MNT-V3 installation using an amber probe 3 mm in dia. Two capacitive diaphragms of different geometry were investigated. Comparison of the results of the calculations and of the measurements shows that the numerical data coincide in the case of a narrow diaphragm ( $d = 15$  mm) within 2.5%, and within 5% in the case of  $d = 26$  mm. V. M. [Translation of abstract]

SUB CODE: 20, 09/00  
Card 1/1



TUGUSHEV, K.Kh., inzh.

Use of plastics in skylight construction. Prom. stroi. 43 no.9:  
16-19 '65. (MIRA 18:9)

31567  
S/081/61/000/022/063/076  
B101/B147

15-6600  
11.9700  
AUTHORS:

Bashilov, A. A., Skachkov, Ye. A., Tugushev, R. Sh.,  
Vandyuk, A. V.

TITLE:

Study of conditions for producing polyisobutylene from  
Groznyy crude oil

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 22, 1961, 397, abstract  
22M123 (Tr. Groznensk. nef. in-t, v. 3, no. 25, 1961,  
35 - 46)

TEXT: The authors give results of laboratory tests for producing poly-  
isobutylene (I) of molecular weight 3500 - 13,800 usable as a condensing  
additive for lubricants. The tests were conducted on the desulfurized  
fraction (DF) with boiling point -7 to +4.5°C produced by rectification  
and desulfurization (passing through solid KOH) from the works butane-  
butylene fraction in 87% by weight yield. The DF contained (% by weight):  
0.3 C<sub>3</sub> hydrocarbons; 16.1 iso-C<sub>4</sub>H<sub>8</sub>; 25.5 n-C<sub>4</sub>H<sub>8</sub>; 57.7 C<sub>4</sub>H<sub>10</sub>, and 0.4  
hydrocarbons C<sub>5</sub> +. Polymerization tests were conducted at -15 to -50°C

Card 1/2

Study of conditions for...

<sup>31567</sup>  
S/081/61/000/022/063/076  
B101/B147

during 2 - 5 hr in the presence of an  $\text{AlCl}_3$  catalyst. The polymerization product was treated with alcohol to decompose the  $\text{AlCl}_3$ . The light components with boiling points up to  $100 - 110^\circ\text{C}/10 \text{ mm Hg}$  were distilled off. The samples of I obtained corresponded to the tentative technical specifications. The highest yield of I (12.9% by weight of DF, or 84% of iso- $\text{C}_4\text{H}_8$ ) was obtained by 3 hr polymerization at  $-15^\circ\text{C}$ . No depolymerization of I occurred when 5% solutions of I in "J" ("L") turbine oil were heated at  $200^\circ\text{C}$  for 5 hr. The solutions retained their viscosity. [Abstracter's note: Complete translation.] ✓

Card 2/2

DASHILOV, A.A.; TUGUSHEV, R.Sh.; GOGIASHVILI, L.S.; DMITRENKO, V.N.

Obtaining transformer oil by the acid-contact method. Neftper.  
i neftekhim. no.8:7-9 '63. (MIRA 17:8)

1. Groznenskiy neftyanoy institut i Groznenskiy neftepererabaty-  
vayushchiy zavod.

1 17049-56 ENI(1) 00

ACC NR: AR6019070

SOURCE CODE: UR/0274/66/000/001/A061/A061

AUTHOR: Gershteyn, G. M.; Tugushev, R. Kh.

REF SOURCE: Sb. Vopr. elektrich. modelirovaniya poley., Saratov, Saratovsk. un-t., 1964, 140-149

TITLE: Simulation of the electromagnetic fields of waveguide heterogeneities

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 1A421

TOPIC TAGS: waveguide, electromagnetic field

TRANSLATION: Calculated and experimentally determined parameters (coefficient of reflection  $R$  and reactive conductivity  $B$ ) of heterogeneities are compared. The electrostatic field of the heterogeneity was used in the experiment. The calculated parameters of the capacitive diaphragm in a waveguide are given for various geometries of the diaphragm. The experimental determination of  $R$  and  $B$  was obtained by modeling the distribution function of the Laplacian electric field of the diaphragm and its substitution in the corresponding functional. The field was simulated on the MNT-V3 device, using an amber probe of 3 mm diameter. Two capacitive diaphragms of different geometry were studied. A comparison of the calculated and measured data shows that in the case of a narrow diaphragm ( $d=15$  mm), the numerical data agree within 2.5% and in the case of a diaphragm of  $d=26$  mm, within 5%. 5 illustrations, 5 tables, 6 references. V. M.

SUB CODE: 09/ ~~SUBM DATE: none~~

UDC: 621.317.34

Card 1/1 *gd*

47  
B

KLEPIKOV, V.G., inzh.; KORNEYCHUK, G.P., inzh.; ZUFAROV, S.Sh., inzh.;  
Prinimali uchastiye: ZINUROV, A.Z.; TUGUSHEVA, F.Z.; LOLEYT,  
Ye.F.; GALIYEVA, D.R.

Putting a plant for the distillation of fatty acids from  
cottonseed soap stocks into operation. Masl. - zhir. prom. 27  
no.8:37-42 Ag '61. (MIRA 14:8)

1. Kattakurganskiy maslozhirovoy kombinat imeni V.V. Kuybysheva  
(for all, except Zufarov). 2. Sredneaziatskiy politekhnicheskiy  
institut (for Zufarov).

(Katta-Kurgan--Oil industries) (Acids, Fatty)

BELYAYEVA, N.N.; DEMYANOVSKIY, S.Ya.; MAMED-NIYAZOV, A.N.;  
TUGUSHEVA, Kh.N.

Chemical composition of leaves of the Khasak mulberry from  
the Bayram-Ali region of the Turkmen S.S.R. Uch. zap. MGPI  
140:55-61 '58, (MIRA 16:8)

1. Iz laboratorii organicheskoy i biologicheskoy khimii  
Moskovskogo gosudarstvennogo pedagogicheskogo instituta  
imeni V.I. Lenina.

17

1952

nonoxidation of refractory clay by electroosmosis. I. I. Tukh, K. I. Tugubeva, and N. B. Kartuna. *Sibla i Keram.* 8, No. 8, 10-12 (1961).—Electroosmosis of 15 kg. of clay for 6 hrs. yielded 10.5 kg. of clay having 42.4% moisture. Further osmosis for 2 hrs. did not yield addnl. results. On a com. scale, yield was 80% but the product contained 80% moisture. The moisture content can be reduced to 40% by increasing c.d. Best results were obtained without addn. of electrolyte; electrolytes did, the suspension but caused electrolysis of drum material and adulteration of clay with PbO. The content of macrodispersed particles was less and the change in plasticity was less sharp than with ordinary clay. Debitense made of clay and grog (45:55) treated by osmosis had a firing shrinkage of 18.0% and water absorption of 4.62-4.78% compared with 11.0% and 9.60-9.33%, resp., for debiteuse made from ordinary clay and grog. N. Z. Kamich



Beneficiation of refractory clay by electroosmosis. I. I. Tukil, N. I. Tuznebova,  
and N. E. Karisma. Steklo i Keram., 8 (8) 10-12 (1961).

Electroosmosis for 6 hr. of 15 kg. clay yielded 19.5kg. clay having 42.4% moisture. An additional osmosis for 2 more hr. did not result in any improvement. On a commercial scale, yield was 80% but product contained 80% moisture. By increasing the current density, it should be possible to reduce the moisture to 40%. The best results were obtained without the addition of an electrolyte to the suspension; electrolytes diluted the suspension but caused electrolysis of the drum material and adulteration of the clay with PbO. Compared with ordinary clay, content of macrodisperse particles was less and change in plasticity was less sharp. Debitouse made of clay and grog (45:55) treated by osmosis had a fire shrinkage of 18.0% and water absorption of 4.62-4.78% compared with 11.0% and 9.60-9.33% for ordinary debitouse.

B. L. K.

immediate source clipping

19

CA

Addition of  $K_2O$  as potash to aluminomagnesian glass.  
 1.1. Tikh and K. I. Tugusheva. *Steklo (Glass)*, No. 4, 7-8 (1951).—Substitution of  $K_2O$  for  $Na_2O$  was in equiv. parts, so that the sum of  $R_2O$  was const. Addn. of  $K_2O$  was 0.5% every 5 days, reaching 1.5%. Final compn. of the glass, as calcd., was  $SiO_2$  72.7,  $Al_2O_3$  0.9,  $Fe_2O_3$  0.14,  $CaO$  8.5,  $MgO$  2.5,  $Na_2O$  13.5, and  $K_2O$  1.5%. The charge melted faster and easier. Glassmelt after the second burner was free of bubbles and boil. Prior to the use of potash there were 128 instances per month of the sheet being ruptured on the machines; after the addn. of potash, there were 108 instances. Water resistance, transparency in monochromatic light, and luster were improved. Color of the glass improved from greenish yellow to greenish blue. Annealing was better because of the drop in coeff. of thermal expansion. B. Z. K.

ACA

*Refractories*

Reheating of refractory clay by electroosmosis. I. I. TUKH, K. I. TUGUSHEVA, AND N. R. KARISMA. *Nekho A-zam*, 8 [8] 10<sup>12</sup> (1951). Electroosmosis for 6 hr. of 15 kg. clay yielded 19.5 kg. clay having 42.4% moisture. An additional osmosis for 2 more hr. did not result in any improvement. On a commercial scale, yield was 80% but product contained 80% moisture. By increasing the current density, it should be possible to reduce the moisture to 40%. The best results were obtained without the addition of an electrolyte to the suspension; electrolytes diluted the suspension but caused electrolysis of the drum material and adulteration of the clay with PbO. Compared with ordinary clay, content of macrolisperse particles was less and change in plasticity was less sharp. Debitense made of clay and goog (15.5%) treated by osmosis had a fire shrinkage of 15.0% and water absorption of 4.62-4.76% compared with 11.0% and 9.60-9.44% for ordinary debitense. B. Z. K.

F

R

PURIFICATION OF REFRACTORY CLAYS BY ELECTRO-OSMOSIS. Tukh, I.I., Tugushova, N.I.,  
and Kariama, N.E. (Steklo i Keram. (Glass and Ceram. ), Aug. 1951, 10-12

BCS

*winning, Preparation  
Shipping*

477. Purification of refractory clays by electro-osmosis.---I. I. TURIN, K. I. TURINAYA and N. E. KAROMA (Sov. Akad. Nauk, No. 8, 10, 1951). For floats used in glass tanks the quality of clay is a matter of first importance since on it depends maintenance of the correct slot size as well as the occurrence of so-called "float bubbles" in the glass. Because a lot of grog is used in making floats, the clay must be very plastic. Electro-osmosis produces such a clay. An expil. installation for clay purification by electro-osmosis is described. To determine the yield, 13 kg. of clay were treated by electro-osmosis for 6 hr. The output was 19.3 kg. of purified clay with a moisture content of 42.4% = 11.2 kg. dry material, i.e. a 75% yield. Further treatment for 2 hr. gave no improvement. In works trials the results were not quite so good because the required

voltage and current density were not reached. The moisture content of the salt on leaving the plant installation was 80%; the output recalculated for dry material was 33 kg./hr. and the yield was 89%. The main demerit of the plant installation was a too high moisture content, leading to drying difficulties. It is assumed, however, that the moisture content could be reduced to 40% by increasing the current density. Although the output of the installation is low, it is sufficient to meet the plant requirements; in 10 hr. enough purified clay is obtained for 1 float, and only 4-5 floats are required per machine per year. Tests on the clay obtained showed that electro-osmosis does not affect chem. comp. or grading of the clay but increases its plasticity. An increased firing shrinkage necessitates higher additions of grog which accelerates the drying of the floats; the porosity of the latter is low--which prevents the occurrence of "float bubbles" and seeds in the glass. (5 figs., 3 tables.)

*On Materials Research*

*B. Z. R.*

5068\* Beneficiation of Refractory Clays by Electro-Osmosis. (In Russian.) I. I. Tukh, K. I. Tugusheva, and N. E. Karisma. *Steklo i Keramika*, v. 8, Aug. 1951, p. 10-12. The above is described and discussed. Analytical data are tabulated and charted; apparatus is illustrated.

41 - (5) - 52

C

...  
**Addition of K<sub>2</sub>O through potash to aluminomagnesia glass.**  
 I. I. TURKE AND K. I. TONUMAYEV. *Shtelo i Keram.*, 8 [4] 7-8 (1951).—The substitution of K<sub>2</sub>O for Na<sub>2</sub>O was made on an equivalent basis (1% Na<sub>2</sub>O by 1.52% K<sub>2</sub>O by weight) so that the sum of R<sub>2</sub>O, calculated as Na<sub>2</sub>O, was constant. The addition of K<sub>2</sub>O was 0.5% every 5 days, reaching 1.5%. The final composition of glass, as calculated, was SiO<sub>2</sub> 72.7, Al<sub>2</sub>O<sub>3</sub> 0.9, Fe<sub>2</sub>O<sub>3</sub> 0.16, CaO 8.5, MgO 3.5, Na<sub>2</sub>O 13.5, and K<sub>2</sub>O 1.5%. The charge melted faster and easier. Samples of glassmelt taken beyond the second burner were free of bubbles and boil. Prior to the use of potash, there were 128 cases of sheet rupture on the machines per month; after the addition of potash, this was reduced to 106 cases. Water resistance, transparency in monochromatic light, and the luster were improved. In addition, the color of glass improved from green-yellow to green-blue. Annealing was also improved because of a decrease in the coefficient of thermal expansion. B.Z.K.

BELYAYEVA, N.N.; DEMYANOVSKIY, S.Ya.; MEMEDNIYAZOV, O.N.; TUQUSHEVA, Kh.N.

Chemical composition of leaves of the khasak mulberry from Bairam-Ali District of the Turkmen S.S.R. Izv. AN Turk. SSR no.5:46-51  
'58. (MIRA 11:12)

1. Prezidium AN Turkmenskoy SSR i Moskovskiy gosudarstvennyy pedagogicheskiy institut im. V.I. Lenina.  
(Bairam-Ali District--Mulberry)



POSTNIKOV, Igor' Sergeyevich; TSITOVICH, Sergey Ivanovich; ~~TUOUSHEVA,~~  
~~Markis Iosifovna;~~ RACHEVSKAYA, M.I., red.izd-va; SHLIKHT, A.A.,  
tekhn.red.

[Preliminary purification of liquid wastes with the use of  
activated sludge] Predvaritel'naya ochistka stochnoi zhidkosti  
metodom biokoagulyatsii. Pod obshchey red. I.S.Postnikova.  
Moskva, Izd-vo M-va kommun.khoz. RSFSR, 1958. 86 p. (MIRA 12:4)  
(Sewage--Purification)

POSTNIKOV, I.S.; ARUTYUNYAN, K.G.; TUGUSHEVA, N.I.; EL', M.A.;  
KARYUKHINA, T.A.

Investigating the operation of an air sedimentation tank at the  
Kur'yanovo aeration station. Nauch. trudy AKKH no.20:80-96 '63.  
(MIRA 18:12)

POSTNIKOV, I.S.; ARUTYUNYAN, K.G.; TUGUSHEVA, N.I.

Laboratory investigation of the process of waste water purification  
with the separate regeneration of active sludge. Nauch. trudy  
AKKH no.20:40-54 '63. (MIRA 18:12)

POSTNIKOV, I.S.; ARUTYUNYAN, K.G.; TUGUSHEVA, N.Yu.; EL', M.A.; KARYUKHINA, T.A.

Semi-industrial studies of air tanks or clarifiers developed by the Academy of Municipal Economy at the Kur'ianovskii aeration station. Sbor. nauch. rab. AKKH no.6:15-35 '61. (MIRA 15:3)  
(Sewage--Purification)